WORKING PAPER





Overseas Development Institute

10-11 Percy Street London W1P OJB Tel: 01-580 7683 THE LIBRARY DATAS DEVELOPMENT INSTITUTE STALLA, RECOLDENCE MOLTER DEPOLE NEGENTIS PARK LONDON NWI ANS



XAAC XAC XAC

ODI WORKING PAPER

No. 1

EXTENT, CAUSES AND CONSEQUENCES OF DISEQUILIBRIA IN DEVELOPING COUNTRIES

Tony Killick*

*Research Officer, Overseas Development Institute

ODI Working Papers present in preliminary form work resulting from research undertaken under the auspices of the Institute. Views expressed are those of the authors and do not necessarily reflect the views of ODI. Comments are welcomed and should be addressed directly to the authors.

March 1981

0 85003 0730

EXTENT, CAUSES AND CONSEQUENCES OF DISEQUILIBRIA IN DEVELOPING COUNTRIES

Economic management is the focus of this volume: the use of policy instruments to deal with the occurrence of destabilising forces; to avoid the instability or to offset its adverse effects. But before enquiring deeply about how this may be attempted, and about the role of the IMF in this context, it is first necessary to establish the extent to which instability is a problem in developing countries, and to say as much as is possible at a general level about its causes. Is there particularly severe instability in developing economies? How large are the movements in question? Do they seriously reduce human welfare and the achievement of government objectives? Are they typically imported from outside, a cost of integration into the world economy, or initiated by forces at home? It is with questions such as these that this chapter is concerned.

First, however, there are some semantics to get out of the way, concerned with what is meant by economic "instability" in this study. There is much to be said for the principle that concepts should only be defined with as much precision as is needed for the task in hand, and it suits present purposes to opt for a little vagueness. In fact, the word instability is not ideal for these purposes. It connotes fluctuations around some normal or trend value. Fluctuations are certainly part of our concern but we are even more concerned with the occurrence of inflation and balance of payments difficulties. But inflation is a trend, a persisting upward movement of the price level; balance of payments difficulties may also persist, becoming a norm rather than a deviation. We therefore prefer to talk of "disequilibrium" - the absence or loss of balance in the economy. It is a word elastic enough to accommodate both fluctuations and more persistent conditions which, in senses to be defined presently, reveal imbalances in the economic system. The objective of economic management thus becomes that of restoring equilibrium to the economy; both to smooth out undesired fluctuations and eliminate unwanted trends in prices and/or the balance of payments.

^{1.} Draft chapter 2 of a study of the International Monetary Fund and economic management in developing countries.

Note from the above that there is no mention of deflation; losses in output and employment resulting from a decline in aggregate money demand relative to productive capacity. Deflation in ldcs is a common result of depressions in the industrial world (as in 1974-75 and 1980-81). It also occurs as a by-product of government measures designed to strengthen the balance of payments and reduce inflation, and such unwanted consequences are of prime concern in this volume. However and leaving aside policyinduced deflation, it does not feature in the following survey of. disequilibria for a number of reasons. First, our principal focus is on the controversies surrounding IMF stabilisation policies and these are almost exclusively concerned to combat balance of payments weaknesses and inflation. Second, the state of ldc statistics creates particularly acute problems for the measurement of deflation. Third, if we leave aside episodes resulting from downturns in the rest of the world and from government attempts to restrain demand, deflation is not as common or abiding as the other types of disequilibria. While it is true that the under-employment of capital and labour is a major feature of ldc economies, this is due more to deep-seated structural characteristics than to a general and persistent deficiency of money demand. At any one time the short-run elasticity of supply is likely to be small in key sectors so that an increase in aggregate demand will result in rising prices as if the economy were fully employed. Evidence consistent with this view is, in fact, presented later.

Finally, we are largely, but not exclusively concerned with macroeconomic variables. There is no hard and fast dividing line between macro and micro. Especially when examining the structural aspects of disequilibrium, it is essential to attend to the behaviour of particular industries or markets. But our already daunting task would become quite unmanageable if we were also to study microeconomic disequilibria and we therefore confine ourselves to examining these mainly for the light they can throw on the macroeconomy.

I - THE EXTENT AND CONSEQUENCES OF INFLATION

As will be shown shortly (Table 2-3), price movements occur essentially in only one direction. The downward stickiness of prices is a world-wide phenomenon, exerting a ratchet effect on the general price level. For this reason, because of the observed spill-over from the same tendency in the rest of the world and because structural disequilibria are bound to occur in a growing economy, some upward drift of prices is unavoidable. Moreover, during the 1950s and 1960s the rate of upward drift in the absence of additional inflationary impulses was too slow in many countries to cause serious economic problems or losses of welfare.

These facts mean that it would be unrealistic to regard zero inflation as a sensible objective of economic policy.² There are attractions to saying that an inflationary disequilibrium exists when the rate of price increase is faster than the desired rate. As is suggested below, it is possible in principle to determine an optimum inflation rate, above which price increases have negative effects on economic growth and other policy goals (see Figure 1). However, such an approach has the disadvantages that general increases in the price level are never desired for their own sake, even though they may be accepted as a necessary consequence of other objectives, and that it is, in any case, virtually impossible to decide on the optimum rate in any concrete situation.

- 2. This point was recently stressed by Whitehead, 1980, p. 858:-
 - What constitutes successful 'stabilisation' of an economy, an effective 'adjustment' in the international environment of the late 1970s? Not even Switzerland still aims for zero increase in the overall level of domestic prices, for when, alone among the nations of the world, it did attain that goal, the result was to induce an inward flight of speculative capital so unmanageable that the exchange rate soared out of control and the level of industrial employment became unsustainable. In the countries considered in this workshop, the most ambitious inflation target now imaginable would be 10%/yr - signifying an exchange rate stable with the US dollar. Other stabilization objectives are equally pragmatic accomodations to an essentially unstable economic setting - e.g. a public-sector deficit that can be financed voluntarily without excessively high interest rates, a disproportionate expansion of the money supply or unsustainable amounts of foreign borrowing, where the definition of 'acceptable' magnitudes is no longer clearcut. The old benchmarks given by exchange rate fixity and low global inflation have disappeared, leaving far more scope for subjectivity and more reliance on such semi-psychological intangibles as 'confidence' in the currency, and 'low expectations' of inflation based on 'sound' economic management. These terms refer, of course, to the subjective attitudes of wealthholders, bankers, fund managers and the like, who on these questions shape the views of society as a whole. In these matters of 'confidence' and 'expectations', opinion is weighted on the basis of one dollar/one vote, not one man/one vote.

It is probably more practical, therefore, to define an inflationary disequilibrium as a persistent tendency for prices to rise at a rate greater than the 'normal' (or unavoidable) rate. The average rate of price increase during the most recent period when inflation was not regarded as constituting a significant problem might be taken as a proxy for the normal but even this approach leaves much to be desired, not the least because the normal will differ between countries. Inevitably, therefore, the following discussion usually refers to the total inflation rate, rather than the excess over the optimum or the normal. Hopefully, this will not make much practical difference.

Relative inflation in ldcs

Although this may not always have been the case, it is well documented that developing countries now generally suffer more from rapid inflation than industrial countries. Thus, of the 21 countries recorded by the IMF as having consumer price increases of 15% or more in 1979, all but one (Sweden) was a developing country. Table 2-1 summarises data beginning 1958 and from this a number of points emerge:

- There was a general worldwide acceleration of inflation over the sub-periods.
- In all periods the Western Hemisphere ldcs experienced much faster inflation than the rest of the world. (The averages in the table are strongly influenced by the statistics of a few persistent hyper-inflation countries like Argentina, Chile and Uruguay but even if these are excluded the remainder of the hemisphere still records a faster rate of increase than any other major region.³
- Non-oil African and Asian ldcs also experienced consistently more rapid inflation than the dcs, although the contrast was less marked: in broad terms, Africa and Asia could be said to have shared with industrial countries an experience of only mild inflation in 1958-72.
- The absolute gap between the dcs and non-oil ldcs widened sharply in 1972-79.
- Despite the absence of financial constraints, oil exporting countries also experienced a considerable acceleration in the latter period.
- Compare the following figures for 1972-78 (from IMF, 1979):
 Western Hemisphere 34.0%
 Western Hemisphere excluding Argentina, Chile and Uruguay 22.0%
 all ldcs excluding Argentina, Chile and Uruguay 16.9%
- Note: the above are weighed geometric means and not directly comparable with the figures in Table 2-1.

5

Table 2-1.	Inflation	Rates	for	Consumer	Prices,	1958-79

(compound rates of increasase, % p.a.)

	•	1958-65	1965-72	1972-79
Industrial c	countries	2.1	4.2	8.8
0il exportin	g countries	2.5	3.5	13.1
Other develo	ping countries	13.6	10.6	23.2
of which:	Africa	5.1 ^a	5.5	19.3
	Asia	4.5	6.0	10.2
	Westerh Hemisphere	23.9	15.9	34.8

Source: IMF, International Financial Statistics.

Note: (a) 1960-65

The above evidence relates to inflationary <u>trends</u> but comparisons of <u>fluctuations</u> around the trend are also to the disadvantage of ldcs a fact of some policy significance, as will be suggested shortly. Investigating the relative price instability of dcs and ldcs, Cole (1976) not only found that instability was greater in ldcs but also that this contrast with dcs was more marked than differences in their inflation rates. This finding has since been corroborated by work of the IMF (1979), the results of which are summarised in Table 2-2.

		,		
		Industrial <u>Countries</u>	Other Western Hemisphere ^b	<u>Asia^b</u>
1.	Inflation rate (% p.a.) ^C	· · ·		
	1965-72	4.2	16.6	6.0
	1972-77	8.9	38.4	11.2
2.	Standard deviation ^d			
	1965-72	1.6	16.1	4.8
	1972-77	4.0	113.4	7.5
3.	Coefficient of variation ^e			
	1965-72	0.39	0,97	0.80
	1972-77	0.45	2.95	0.67

Table $2-2$.	Relative Price	Instability of	Selected	Regions	1965-77 ^a
TADIC 2 2.	VETACIAC TITCE	THOCADITICY OF	<i>octered</i>	NCELOUS,	

Source: IMF, 1979, Table 9.

- Notes: (a) The inflation rates are not quite comparable with those in Table 2-1 because of minor differences in country coverage. Data are not available for all 1dcs combined or for Africa.
 - (b) Excluding oil exporting countries.
 - (c) Weighted mean rates of increase in consumer price indices.
 - (d) These are the mean values of SDs for each of the five years.
 - The annual SDs were computed from monthly observations.
 - (e) Calculated directly from entries (1) and (2).

We see there the general result that the extent of price instability, as measured in entries 2 and 3, is consistently larger for the two developing regions (unfortunately the source does not provide data for all ldcs together nor for Africa) when compared with the industrial countries. This is true both of the period of moderate inflation, 1965-72, and for the rapid inflation years, 1972-77. It is also apparent from the table, however, that the degree of price instability is itself positively correlated with the rate of inflation (although the behaviour of the Asian coefficient of variation is an exception to this), so that to some extent the greater price instability in ldc regions is a consequence of their more rapidly rising price levels.

before turning to consider the probable effect of these characteristics on ldc economies, there is one other feature of modern price behaviour which should be demonstrated, namely that inflation is apparently irreversible. Table 2-3 presents figures on the direction of changes in consumer price indices, from which it can be seen that in industrial and developing countries alike the vast majority of changes are upward. Out of 240 industrial country observations there were no occasions at all when an index fell; in developing countries a fall occurred in only 31 out of 700 observations. Since downward stickiness of prices is often attributed to the power of trade unions and the pricing policies of industrial oligopolies, greater downward flexibility might be expected in ldc conditions; its absence suggests that the most governments can realistically hope for is to prevent (or moderate) further price increases. The price level does not actually fall even in response to deflationary policies.

Table 2-3 - Direction of	of Change	of Consum	er Price	Index, 1964	-74
	<i>:</i>	index fell	no change	index rose	<u>total</u>
INDUSTRIAL COUNTRIES					
No. of observations		0	1	2 39	240
% of observations		0%	0.4%	99.6%	100.0%
DEVELOPING COUNTRIES		· .			
No. of observations		31	8	661	700
% of observations		4.4%	1.1%	94.4%	100.0%

Source: U.N. Statistical Yearbook, 1975. Table 183.

There is thus much evidence that the incidence of inflation and price instability has become particularly severe in developing countries. This statement is not sufficient, however, to demonstrate that these phenomena are problems requiring corrective action by ldc governments. For antiinflation policies are also likely to impose costs on the economy and it cannot be deduced from the mere fact of inflation, even rapid inflation, that anti-inflationary measures would result in net benefits. For one thing, there is the structuralist position that inflation is the inevitable by-product of economic development and that governments should therefore adopt a passive attitude towards it. It is thus necessary to review the arguments and evidence concerning the impact of inflation on development before we can draw any conclusions about the desirability of anti-inflation policies.

The developmental consequences of inflation⁴

According to the structuralist view, there will exist at any given time some sectors which are underutilised and suffering from inadequate demand coexisting with others experiencing excess demand and rising prices. Because of poor information flows, shortages of entrepreneurial and capital resources, policy biases and other factors making for small elasticities of supply, large disequilibria will be necessary before economic forces respond to break the bottlenecks. Because of downward stickiness, rising prices in excess demand sectors will not be offset by falling prices in the excess supply sectors and there will thus be a continuous (but probably not very rapid) upward movements in the general price level. The agricultural sector is likely to be important in this context, with its small short-run elasticities of supply and its tendency in many countries to lag behind the expansion of the remainder of the economy. A heavy cost would be imposed in terms of reduced output and growth if total demand were held to such low levels that prices were stable even in the low-elasticity sectors. At least at moderate rates of inflation, a trade-off is thus postulated between growth and inflation: a society that gives priority to growth must be willing to tolerate the inflation that comes with it.

Many economists accept the validity of this argument and of the view that governments should allow aggregate demand persistently to exert mild pressure on available resources, as a stimulus to investment.

^{4.} Killick, 1981, chapter 7 for a fuller discussion of the arguments presented in the following paragraphs.

Some have gone further to positively advocate inflationary deficit financing by the government as a means of accelerating growth. The essence of this argument is that this demand inflation will redistribute income in ways which raise saving and investment. Company profits (and self-financed investment) will go up as firms find themselves able to raise prices without corresponding increases in costs. The government budget, so it is argued, will also benefit, in the form of revenue from the 'inflation tax', which is the loss of real purchasing power imposed by rising prices on holders of money balances. So long as companies and the government have larger marginal propensities to save than the groups in society whose real incomes fall, total saving and investment will be increased. And if investment is the binding constraint on the growth of the economy the rate of growth will accelerate.

In opposition to this, there are others who argue that inflation is more likely to hamper growth. Far from encouraging saving, rising prices penalise it by eroding its real value. Inflation, it is further argued, tends to distort the composition of investment in favour of quick-yielding, perhaps speculative, projects while discouraging long-term investments in research or heavy industry. Moreover, inflation, the greater price instability that accompanies it, and the expectation of counter-measures by the government, will be imperfectly anticipated thus increasing uncertainty and making forward planning more difficult. This will deter some investment altogether and reduce the productivity of the investments which do occur. In the extreme case, hyper-inflation results in a flight out of money, a breakdown in the allocative efficiency of the economy, severe bottlenecks, dysfunctional changes in the distribution of income and retarded growth.

However, it is argued, probably the most potent way in which inflation can harm growth is through its effect on the balance of payments. If (a) inflation at home is faster than the general rate of world inflation and (b) the exchange rate is fixed or imperfectly flexible then excess demand at home will spill over into additional imports, and export production costs will rise without compensating increases in world prices. The balance of trade will thus be weakened and the economy may encounter a foreign exchange constraint.

These various arguments conflict in every way except one: they all treat growth as the dependent and inflation as the independent variable, with causality running from the latter to the former. It is, however, possible to reverse this hierarchy, to argue that inflation will be a diminishing function of the real growth of the economy. Growth expands the supply of goods and services which, if not accompanied by equal increases in demand, can absorb previously existing pressures of excess demand. The growth of real incomes will increase the demand for money balances relative to money supply which will diminish any excess supply of money and excess demand for goods.

There is thus a wide range of viewpoints on the likely connections between inflation and growth, yielding quite different hypotheses and policy implications. It is, nevertheless, possible to suggest a limited degree of consensus within the profession. This would postulate an inverted-U-shaped relationship between inflation and growth of the type illustrated in Figure 2-1.⁵ At one end of the inflationary spectrum, it is suggested, there would be general agreement that there is some 'safe', low range of inflation which will be positively associated with growth because it will stimulate capacity utilisation and investment or, more negatively, because the policies needed to avoid it would slow down the expansion of the economy. It is also in this range that the growth of output will have its most noticeable effects in moderating inflationary pressures. At the other end of the spectrum, there would probably be wide acceptance that very rapid inflation is harmful to growth, for reasons already outlined. If there is an inverted-U relationship, it implies the existence of an optimal rate of inflation (b in Figure 1), above which it becomes increasingly important for the government to take corrective action.

^{5.} The article by Lucas (1973) is of particular interest in this context because he implicitly postulates an inverted-U relationship. He suggests that the deliberate use of inflation to stimulate output is only likely to succeed if it misleads suppliers into thinking that relative prices are moving in their favour, and this is only likely if inflation is employed only occasionally and moderately. This illusion is unlikely to survive persistent inflation, however, as producers come to realise that they are faced with a general, rather than a particular, price movement.

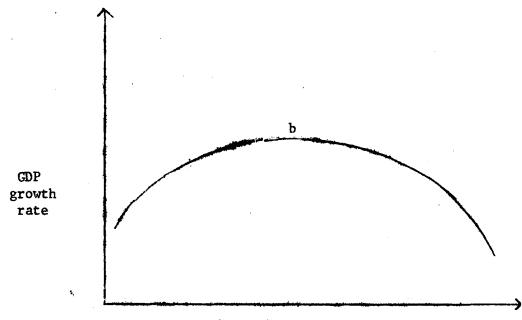


Figure 2-1. The relationship between inflation and growth

inflation rate

However, only a limited consensus is claimed. Most would probably agree that single-figure inflation is in the 'safe' range; and that rates of above, say, 25% are likely to hamper the growth of output. The remaining disagreement is about the effects of inflation within the notional range of 10% to 25% - but it is in that range that much inflation occurs!

It should, in principle, be possible to establish the nature of the relationship in question through econometric testing. There are, however, a number of complicating factors. First, there are many influences on the growth of an economy besides the behaviour of the price level - influences which are difficult to capture adequately in regression models. Second, the relationship hypothesised in Figure 1 is non-linear and is thus not well suited to testing by the techniques of linear regression. Third, it is possible for various of the influences summarised earlier to be at work simultaneously but tending to cancel each other out: the top of the invested-U may be roughly horizontal over a range of inflation values and this would result in weak correlations. Finally, there are difficulties of interpretation, about the direction of causality between inflation and growth.

It is therefore unsurprising that few empirical studies of the gorwthinflation relationship have arrived at strong statistical results. Thus, a substantial study by Thirlwall (1974 chapter 9) failed to find strongly significant correlations between these two variables. A study of 19 Latin American countries by Galbis (1979) similarly found that inflation had no explanatory value for variations in growth rates. Nevertheless, some studies have produced evidence consistent with the inverted-U hypothesis - results which are not individually strong but which collectively do assume some substance.

Take first the following naive but suggestive results of grouping developing countries according to their inflation rates and comparing their mean GDP growth rates, for 1970-77 (figures in brackets indicate the number of countries in each class):⁶

inflation rate	growth rate of real GDP
below 10% (33)	4.0
10% to 20% (41)	5.5
above 20% (11)	2.5

Move now to the results of more sophisticated tests. Thirlwall and Barton (1971) found that the highest investment ratios were found in countries with intermediate levels of inflation, compared with low- and high-inflation countries. They also found a definitely negative correlation among developing countries between growth and inflation rates in excess of 10%. Tun Wai (1959) found a positive relation between growth and inflation up to an 'optimum' rate of 12.8%, above which growth apparently declined, although the statistical significance of the results was not high. Dorrance (1966) also obtained results consistent with the inverted-U hypothesis, as did Lucas (1973).

Since the growth of an economy is likely to be strongly influenced by the rates of saving and investment, an alternative approach to the study of the influence of inflation is to measure its effect on these variables. Here too the evidence is not strong, with most results having unsatisfactory levels of significance. Nevertheless, Thirlwall (1974) did obtain results on the behaviour of saving which conform to the inverted-U contour, and results on investment which indicated that it was adversely affected by rates of inflation above some critical level. Galbis (1979), on the other hand, found inflation to have no explanatory value for private investment (with either sign), on the basis of Latin American data.

Evidence was presented in Table 2.2 showing ldcs to exhibit a greater degree of price instability (i.e. fluctuations around the inflationary trend) than industrial countries so the question arises what consequences

Computed from data in World Bank, Morld Development Report, 1979 (Washington, 1979).

this is likely to have. It is possible that instability could be more adverse to growth than inflation itself, on the grounds that the main disadvantage of price movements is that they add to uncertainty, increasing the riskiness of investment and making forward planning more difficult.

On the basis of such considerations, two studies have tested for correlation between growth and price instability. Cole (1976) utilised cross-section data for 32 ldcs and, with GDP growth as the dependent variable, tested for correlation with (a) the trend rate of inflation and (b) fluctuations around the trend. He found negative relationships in both tests but obtained stronger results with fluctuations as the independent variable. The \mathbb{R}^2 s were small but significant.

Glezakos (1973) undertook a more elaborate test of the effects of uncertainty. Instead of measuring deviations of prices from trend, he took deviations from alternative models of rational expectations (i.e. unanticipated changes) as his independent variable. His results referred to 41 ldcs in 1953-68 and included: (a) the negative effect of the trend rate of inflation was insignificant; (b) the negative effect of price instability was significant, in the strongest cases, at the 1% level; (c) price instability explained 12% to 21% of observed variations in income growth rates, depending on the form of the equation. He urged caution about deriving conclusions from cross-section data but nevertheless suggested that stabilisation of the inflation rate might be a more appropriate policy objective than reduction of the rate itself. However, since the trend rate and instability around it are positively correlated this suggestion may not imply much departure from conventional policies.

As a final variation on attempts to establish the relationship between growth and inflation, we should mention the studies which have placed inflation on the left-hand side of the equation and put growth among the explanatory variables. As is reported more fully on page 36, there is much supporting evidence for a negative correlation. The difficulty, of course, is to decide in which direction the causality runs.

So far the discussion has related exclusively to the connections between price movements and economic growth. But it is no longer necessary to argue that growth is only one aspect of economic development. We must pay attention to the impact of inflation on the structure of the economy, on poverty and on the distribution of income, although the evidence is tentative. Take first the impact on productive structure.

It is intuitively plausible to think that accelerating inflation will be associated with increased <u>relative</u> movements of prices within the economy. For one thing, there are liable to be considerable differences in the supply elasticities of different sectors. Indeed, Hirschmann (1958) is among those who have advocated the use of inflation to stimulate output by providing large incentives for fresh investments in low-elasticity sectors. We are not aware of any direct evidence on the behaviour of relative prices during inflation in developing countries, but there is evidence from America that changes in relative prices are a positive function of the general rate of inflation (Vining and Elwertowski, 1976).

Changing relative prices are likely to induce changes in the composition of output if they are of a more than transitory nature. Whether inflation persistently biases relative prices in favour of particular sectors is not clear and Spraos (1977) has suggested, on the basis of theoretical considerations, that the outcome will be crucially influenced by whether the problem is one of demand or cost inflation. In the case of cost inflation, he suggests that relative prices will shift systematically in favour of manufacturing; demand inflation will shift relative prices in favour of primary production, of which foodstuffs is likely to be the most important component. From a different standpoint, the structuralist school claims a persistent tendency for final food prices to rise relative to the general level, although they have supply bottlenecks and anti-agricultural policy biases in mind, rather than general excess demand. There is, in fact, some evidence of a bias towards agriculture. For example, the median inflation rate for the 70 developing countries covered by Table 2.3 was 6.9% p.a., while the median rate for food items alone was 8.4%. On alternative assumptions about the weight of food in the total index, this implies that food prices rose 35% to 50% faster than non-food items. Nork by Edel (1969) also finds evidence of a tendency for rising relative food prices.

Any tendency for food prices to outstrip the general price level will also influence the <u>distributional</u> consequences of inflation, and the same is true of other ways in which the price level interacts with the productive structure. More generally, the incidence of gains and losses will depend upon the nature of the inflationary process; and upon the abilities of different groups in society to anticipate inflation and protect themselves against it. It is difficult to generalise but if we take the case of demand inflation, with supply elasticities in foodstuffs production lower than for most other goods and a fixed exchange rate, then the gainers are likely to include

(a) the producers and distributors of foodstuffs; (b) those who derive their incomes from profits (because final selling prices rise faster than costs when there is demand inflation); and (c) distributors of imported goods (because bouyant demand conditions and a foreign exchange constraint will result in a scarcity premium on such goods). The <u>losers</u> from this type of situation will include (d) the economically inactive (the unemployed, housewives, the aged); (e) the urban poor; (f) other members of the urban wage-labour force; and (g) exporters (faced with rising costs and a fixed exchange rate).

If this is accepted as a likely outcome, then it seems more likely than not that inflation will increase inequalities, with the urban poor being especially vulnerable, although this conclusion would need to be modified if smallholder food farmers were substantial beneficiaries. There is, unfortunately, no systematic evidence on the distributional effects of inflation in ldcs but a study of Brazil concluded that 'big industrialists, merchants and contractors, together with big landlords' were the most probable gainers. Studies of Ghana and India also suggest that inflation increased inequalities and we are not aware of country studies showing the opposite.⁷

^{7.} On Brazil see Kahil (1973, p. 332); on Ghana, Lisk (1976); and on India, Gupta (1974).

II - FAYMENTS DISEQUILIBRIA AND THEIR CONSEQUENCES

Conceptual difficulties

Turning now to the notion of a balance of payments disequilibrium we must again start by defining terms. The meaning of a payments disequilibrium is neither self-evident nor simple but it is a concept of central importance to this volume.

Take first the notion of a balance of payments <u>deficit</u>. Since as a matter of double-entry book-keeping the complete balance of payments accounts sum to zero, a deficit can only refer to a sub-total, or partial balance. The three most commonly used sub-totals are the balance on current account (visible trade plus services and non-governmental transfer payments), ⁸ the basic balance (the current account plus official transfers plus long term capital movements), and the overall balance (which includes short-term capital movements, errors and omissions, and is that balance which must be matched by a corresponding change in official foreign exchange reserves). Depending on country circumstances, all these balances yield important information and wise officials will study a range of indicators before forming judgements about the health of their country's payments position.⁹

How, then, can we define a payments <u>equilibrium</u>? In a country for which, say, the basic balance is the best single indicator it is tempting to define equilibrium as the existence of an approximately zero basic balance but the apparent simplicity of this falls away on closer examination. First, there is the question of the time span over which this should be measured. It is clearly desirable to eliminate purely seasonal influences by taking a period of at least twelve months, but what of slightly longerlasting but still essentially temporary disturbances emanating, perhaps, from oscillations in world commodity prices? Here it is useful to distinguish between temporary disequilibria, which should normally be financed by the accumulation/decumulation of reserves and perhaps by short-term borrowing, and what the IMF calle fundamental disequilibrium.

S. It is preferable to exclude official transfers from the current account because most of these are aid flows that are more appropriately treated as a form of long-term capital inflow. Usages differ, however, and some statistics of the current account include all transfers.

^{9.} For a sophisticated recent discussion of payments indicators and their implications for adjustment policies see Salop and Spitaller, 1980.

a persistent tendency to experience unwanted payments deficits (or, theoretically, surpluses) which cannot be financed indefinitely and thus call for more fundamental correctives.

But even if a country is able, taking one year with the next, to maintain an approximately zero basic balance, this does not necessarily signal an equilibrium situation. The achievement of this result may prevent the government from securing a desired increase in its cushion of foreign exchange reserves, or a reduction in external indebtedness. To secure a zero basic balance the government may be forced to impose harsher exchange controls or import duties than it would wish. Or it may have to maintain restrictive deflationary domestic policies so as to restrain the demand for imports. In other words, the definition of disequilibrium is a conditional one, dependent on the simultaneous satisfaction of other desiderata. The maintenance of a long-term payments equilibrium remains an important policy objective but it has to be given a rather complex definition:

Balance of payments equilibrium exists when, in a normal year, the basic balance (or that balance chosen as most appropriate for the country in question) approximates zero in conditions where: there are no major unwanted restrictions on trade and payments; external debts and debt servicing are not regarded as too large; foreign exchange reserves are regarded as adequate; and the equilibrium does not depend on the maintenance of unwantedly deflationary domestic policies.

Two further points of clarification. First, it may be important to disaggregate sources of disequilibrium which are exogenous and beyond the control of domestic policies, either because they emanate from world economic conditions or from acts of God, and those which are to a greater extent endogenous and within the influence of government, such as export supply bottlenecks or excess domestic demand. As is shown later in this volume, the policy correctives needed to cope with disequilibria are likely to differ in the two cases.

Second, the notion of import capacity is important to an understanding of the state of the balance of payments. Countries export and seek other sources of foreign exchange primarily in order to buy the products of other nations. Economic development and growing incomes will generate a rising demand for such imports. A crucial test of a country's payments performance,

therefore, is whether it is able to expand import capacity in line with import demand. If it cannot do so it will have to resort to unwanted controls and/or deflationary policies and thus cannot, on the definition offered above, be said to have achieved equilibrium.

As we turn now to examine the evidence on the extent of payments disequilibria, it will be evident from the above that it is impossible to reduce this to simple statistical measurement. It is rather a matter of drawing upon a variety of indicators to convey the extent of the problem.

Evidence on payments disequilibria

We start by discussing indicators of <u>temporary</u> disequilibria, for which the most readily available evidence concerns the instability of export earnings. It is widely accepted that ldcs export products whose prices are more volatile than the export prices of the industrial nations and that this often leads to wide fluctuations in export receipts. This can be measured in various ways and Table 2-4 presents two of these, comparing ldcs and dcs, and trends over time.

Measured deviations from:	Developed 1952-61	countries 1962-71		loped countries 1962-71
moving average	5.6	4.0	8.4	5.7
logarithmic trend	9.3	6.0	11.3	9.0

Table 2-4. Comparative Indices of Export Earnings Instability

Source: Murray, 1978, Table 1.

It is apparent that there was a global tendency towards reduced instability between the two sub-periods, enjoyed by both country groupings, but it seems almost certain that similar measurements for the remainder of the 1970s would show instability increasing again.¹⁰ What is more relevant for present purposes, however, is that for both sub-periods the instability experienced by 1dcs was substantially the larger by both measurements shown in the table.

10. See Lawson, 1980 (p. 107) who argues that "in the late sixties and especially in the early seventies export instability was rising rapidly back towards the levels it had attained in the fifties."

Another indirect indicator of vulnerability to short-term disequilibria is set out in Table 2-5 which provides measures of instability in the commodity terms of trade.¹¹ Here too we see a large and consistent tendency for the instability experienced by ldcs to exceed that of dcs. In this case the data go up to 1975, thus incorporating the commodity boom and oil price increases of the first half of the 1970s, and show a marked increase in the instability indices.

Table 2-5. Coefficients of	Variation of Terms	of Trade
	(percentages;	unweighted averages)
	1960-70	<u>1965–75</u>
OECD countries	3.77	7.03
<u>Developing countries</u> with 1974 per capita GNPs of: ^a		
over \$800	9.20	11.46
\$301-800	8,98	12.40
\$300 and less	8.48	10.67

Source: Dell and Lawrence, 1980, Table 4.

Note: (a) Oil exporting ldcs excluded.

As a further indicator of vulnerability to short-term payments fluctuations we can add the information that developing countries appear generally to experience considerably greater instability in their foreign exchange reserves than the industrial countries.¹² This plus the evidence presented in Tables 2-4 and 2-5 is sufficient to create a strong presumption that ldcs are especially prone to this type of disequilibrium.

Whether this matters much is a moot point, however. One can predict on <u>a priori</u> grounds that short-term instability would impose welfare costs in a number of ways. It requires the countries most vulnerable to sudden disturbances to maintain a larger stock of international reserves,

12. Cole, 1976 Table 2, presents data on the standard error of the ratio of foreign exchange reserves to import values for 10 industrial countries and 52 ldcs in 1960-72. From these it can be computed that the (unweighted) average standard errors for the two groups were 7.33 and 9.57 respectively.

^{11.} It should be emphasised that Table 2-5 measures deviations from trend values, in either direction, and that this is quite a separate issue from the controversy about secular movements in the terms of trade of primary product exporters or of ldcs.

relative to the value of their international payments, than would otherwise be the case and this locks up real resources (the imports foregone) which could otherwise be used for consumption or investment goods. The unpredictability of incomes derived from exporting, the destabilising impact of fluctuating reserves on the money supply, and the possibly negative effects of measures adopted to cope with sudden payments crises can all be expected to increase uncertainties and the riskiness of investment, and to discourage saving, thus retarding economic growth.¹³ Empirical research has, however, failed to yield conclusive evidence of significantly negative effects, with results varying from one study to the next. On the basis of a survey of this evidence Bird (1978, p. 49) concluded that:

the empirical evidence currently available does not permit a firm conclusion to be reached concerning either the quantitative or indeed the qualitative consequences of export instability. Whilst there are theoretical reasons and some data which suggest that many developing countries could suffer as a result of export instability, there is also enough evidence to suggest that not all countries which experience export instability do necessarily or automatically suffer as a direct result of it.

What seems likely is that negative effects are present but that these are of modest size and are swamped by other determinants of economic activity, thus failing to yield strong regression results. To the extent that ldcs do particularly suffer from payments disequilibria, therefore, it is <u>persistent</u> deficits that are likely to be the more damaging. We proceed, therefore, to survey the evidence on this.

Take first trends in the commodity terms of trade. Much research has been devoted to examining long-term trends in the terms of trade of primary producers and of developing countries, with results varying according to the period and product or country grouping chosen.¹⁴ What is not much in dispute, however, is that since the end of 1973 the movements in the terms of trade of oil-importing ldcs has been generally adverse, with IMF data showing a 17% deterioration between 1973 and 1979.¹⁵

Such a trend has naturally tended to accelerate what some (e.g. Balassa, 1964) have argued to be a secular deterioration in ldcs' balance of trade.

15. See IMF, Annual Report, 1980, Table 4.

See Bird, 1978, chapt. 3, for a survey of, and reference to, the literature. Lim, 1980, has since utilised Friedman's permanent income hypothesis to suggest that export instability may actually raise assregate saving, a view for which he finds some supporting evidence.

^{14.} See Bird, op. cit. chapt. 4 for a survey of this literature.

It is well known that ldcs, other than the oil exporters, persistently record large current account deficits, which have grown larger in recent years. Thus, in 1976-79 oil-importing ldcs incurred aggregate current deficits of \$122 bn, against surpluses of \$19 bn by the industrial countries and \$145 bn by the major oil exporters. Comparisons of absolute magnitudes can mislead, however, because they need to be related to the value of trade of the respective country groupings. Table 2-6 therefore provides figures showing the current deficits expressed as a proportion of imports.

Table 2-6. Current Account Deficits of Industrial Countries and Oil-importing ldcs as percentage of Merchandise Imports,

	1973-	/ 3 ~					.
1973	1974	1975	1976	1977	1978		verage fot period
(2.9)	0.7	(4.2)	0.1	0.5	(3.7)	0.4	(1.3)
10.8	25.2	27.9	19.1	13.9	15.5	19.3	18.8
7.5	26.4	27.0	16.7	9.3	9.1	15.3	15.9
35.4	44.2	41.5	24.8	15.8	27.3	32.8	31.7
	(2.9) 10.8 7.5	1973 1974 (2.9) 0.7 10.8 25.2 7.5 26.4	1973 1974 1975 (2.9) 0.7 (4.2) 10.8 25.2 27.9 7.5 26.4 27.0	1973 1974 1975 1976 (2.9) 0.7 (4.2) 0.1 10.8 25.2 27.9 19.1 7.5 26.4 27.0 16.7	1973 1974 1975 1976 1977 (2.9) 0.7 (4.2) 0.1 0.5 10.8 25.2 27.9 19.1 13.9 7.5 26.4 27.0 16.7 9.3	1973 1974 1975 1976 1977 1978 (2.9) 0.7 (4.2) 0.1 0.5 (3.7) 10.8 25.2 27.9 19.1 13.9 15.5 7.5 26.4 27.0 16.7 9.3 9.1	Ar Ar 1973 1974 1975 1976 1977 1978 1979 (2.9) 0.7 (4.2) 0.1 0.5 (3.7) 0.4 10.8 25.2 27.9 19.1 13.9 15.5 19.3 7.5 26.4 27.0 16.7 9.3 9.1 15.3

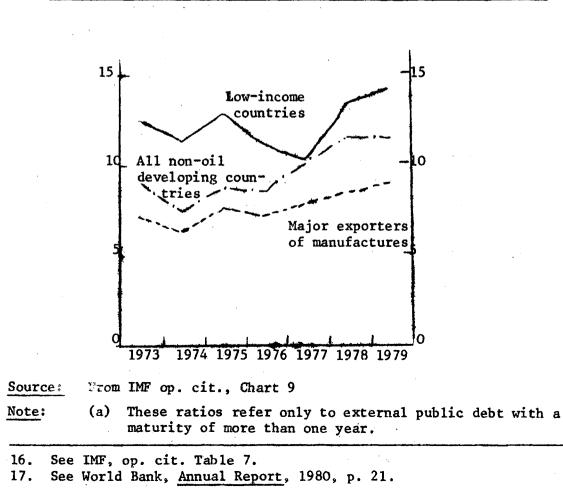
Sources: IMF Annual Report, 1980, Table 9 for ldcs; various IMF publications for industrial countries

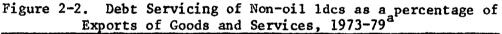
Note: (a) Current account excludes official transfer payments. Figures in brackets indicate current account surpluses.

A number of features emerge from this. We see that ldcs experienced deficits throughout this period, whereas the industrial countries recorded surpluses in three of the seven years, as well as an overall surplus for the period as a whole. The average deficit for the oil-importing ldcs was equivalent to nearly one-fifth of imports but there were large differences between the two ldc sub-groups shown in the lower part of the table. The position of the low-income ldcs was consistently much the worst, with an average deficit equal to nearly a third of imports. These were also the countries experiencing the largest absolute year-to-year fluctuations in the size of their deficits relative to imports, twice as large as for all oil-importing ldcs taken together and over five times as large as the industrial countries.

This evidence, while it is certainly suggestive, is however insufficient as a measure of disequilibria because when data on the basic balance are examined a completely different picture emerges. Inflows of long-term capital were more than sufficient in 1976-79 to finance the current deficits of oilimporting ldcs (\$192 bn against \$122 bn), who were actually able to increase the value of their reserves by \$54 bn.¹⁶ But while these figures provide a warning against taking too alarmist a view of ldcs' payments position, they also need to be interpreted with care.

First, recall that payments equilibrium was defined in relation to desired levels of external debt. Clearly, financing on the scale just mentioned involved large increases in external indebtedness, by no means all of which were desired (the external debts of ldcs went up from \$142 bn at end-1974 to \$376 bn at end-1979¹⁷). Moreover, an increasing proportion of borrowing was on commercial terms, with higher interest rates and shorter repayment periods than from most official sources. The financial cost of servicing this debt thus rose well over 3-fold in 1974-79 (from \$21 bn to \$69 bn). It also rose relative to export earnings, as shown in Figure 2-2. Here too the position of low-income ldcs is revealed as particularly unfavourable, with respect both to the steepness of the trend since 1977 and the absolute size of the ratio.





Payments equilibrium was also defined earlier by reference to the maintenance of a desired level of foreign exchange reserves and on this subject figures showing an increase for non-oil ldcs need to be treated with caution. When expressed relative to the value of imports, ldc reserves are smaller than for the other major country groupings, even though the greater instability of their trade creates a <u>prime facie</u> case for a relatively larger cushion of reserves.¹⁸ As at end-1979 ldc reserves were equivalent to 35% of 1979 imports, against proportions of 40% and 68% for the industrial and oil exporting groups respectively. Unfortunately, separate data are not available for the low-income sub-group of ldcs, but that their reserve ratio is lower than for other non-oil ldcs at end-1979 was only an estimated 22%, against the overall ldc average of 35%.

We should also beware of money illusion. For while the nominal value of ldc reserves increased during the 1970s this did not keep pace with the rising import bill. And if we again use the non-oil African ldcs as a proxy for all low-income ldcs, we should note that their reserve ratio fell from an estimated 26% to 22% in 1973-79. Moreover, much of the increase in the nominal value of ldc reserves was the fortuitous result of the steeply rising world price of gold.¹⁹

There are further reasons why we should not take figures of current account deficits and their financing as sufficient indicators of the state of ldcs' balance of payments. Recall in this connection that a payments equilibrium was defined above as being conditional upon the absence of unwanted controls on imports and capital transactions. It is well known, however, that many ldcs maintain extensive exchange controls for balance of payments purposes - controls they would presumably prefer to avoid (with given exchange rates) if their payments situations allowed it. This clearly is not a factor easily reduced to statistical demonstration but some substantiation can be inferred from the fact that as at the end of 1978 58% of the ldc members of the IMF maintained restrictions on current account payments,

18. See Bird, 1978 chapt. 5, for a discussion of ldcs' demand for international reserves.

19. When adjusted for a break in the import time series in 1975, non-oil developing countries' total international reserves were equivalent to Collect of imports at end-1973 and 35.0% at end-1979. If we exclude the increase in reserves attributable simply to higher world market gold prices the ratios are 38.4% and 24.6% respectively. On the same basis, the ratio for non-oil African 1dcs fell from 31.3% to 16.5%. Calculations based on IMF, op. cit., Table 14 and International Financial Statistics.

against only 6% of the Western industrialised country members.²⁰ Despite controls, however, a number of 1dcs experience difficulty in meeting their obligations, so that, for instance, the Fund management in 1980 expressed its "utmost concern" over the increased number of countries reporting arrears in current or capital payments.²¹ The Fund also reported that the number of 1dcs with arrears on current payments or seeking to re-negotiate debt obligations grew from 3 in 1974 to 18 at end-1978. It is also symptomatic of the special tendency for 1dcs to experience payments difficulties that in recent years it is almost exclusively 1dcs which have negotiated stand-by arrangements with the IMF: all except one of the 41 stand-by arrangements in force during the Fund's 1979/80 financial year was with an 1dc.²²

Finally, there is clear evidence that ldcs are often forced to manage their balance of payments by cutting down on the volume of imports (one reason for the prevalence of exchange controls). This makes data on current account deficits and their financing particularly imperfect indicators of disequilibria. Thus, Dell and Lawrence (1980) undertook a detailed study of the ways in 13 ldcs adjusted to the oil crisis of 1974-75 and found that 8 of these had been forced into policies which resulted in a compression of 'developmental' imports below the quantity that would normally be required at current levels of activity. That such an experience was common for the mid-seventies is also suggested by Figure 2-3 which also shows, however, that it was the low-income ldcs that were much the worst affected. A more recent IMF estimate suggests that in 1979 the import volume of low-income ldcs was only 5% above the 1973 level, implying a substantial per capita reduction.²² It is thus misleading to examine payments disequilibria in terms of the amount of financing needed to cover current account deficits. To some extent the size of the deficits is a function of expectations about the amount of financing available and the terms upon which it can be obtained.

Notwithstanding the intrinsic difficulty of measuring payments disequilibria, the evidence accumulated on the preceding pages is perhaps sufficient to demonstrate that developing countries, particularly the poorest of these, are especially prone to payments difficulties. It is, moreover, clear that these have increased since 1973. It remains now to consider the consequences of this for the performance of their economies.

^{20.} Calculated from the analytical appendix of IMF <u>Annual Report on Exchange</u> <u>Arrangements and Exchange Restrictions</u>, 1979, pp. 466-470, oil-exporting countries excluded. The 6% of dc members was, in fact, one country, Iceland It is interesting, however, that a similar calculation for 1dc members at end-1969 showed that a higher proportion, 71%, was then maintaining current restrictions.

^{21.} IMF Survey, 4 August 1980, p. 233.

^{22.} IMF Annual Report 1980, Appendix Table I.2.

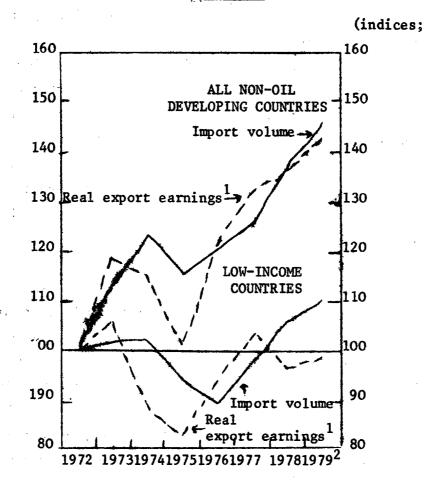


Figure 2-3. Real Export Earnings and Import Volumes of Non-oil Ldcs, 1972-79

1972 = 100)

Source: IMF Annual Report, 1979, Chart 11.

Notes:

1. Export earnings deflated by import prices.

2. Fund staff projections.

The balance of payments and economic growth

On <u>a priori</u> grounds we can hypothesise that payments disequilibria would affect performance adversely for at least three reasons. First, imports, especially of producers' and capital goods, can be regarded as inputs into the productive system. Since payments disequilibria will manifest themselves in shortages of foreign exchange, these will limit access to these inputs, thus tending to impede production and capital formation. Foreign trade can secondly be seen as contributing to economic development through the direct impact of the export sector on GDP, saving and investment. Third, the balance of payments situation can affect economic growth through the ways in which it conditions the expansion of aggregate demand (Thirlwall, 1979, p. 46): The importance of a healthy balance of payments for growth can be stated quite succinctly. If a country gets into balance of payments difficulties as it expands demand, before the short term capacity growth rate is reached, then demand must be curtailed: supply is never fully utilised; investment is discouraged; technological progress is slowed down, and a country's goods compared to foreign goods become less desirable so worsening the balance of payments still further...

In short, countries may cope with their payments difficulties by policies which restrain the growth of demand and output. There is the additional consideration that deficits induced by adverse movements in the commodity terms of trade, as was common for non-oil ldcs from the mid-seventies, necessarily impose negative real income effects by altering the distribution of the gains from trade.

What is the state of the evidence concerning the above hypotheses?

If we begin with the connection between import capacity and economic growth, there is substantial evidence of a positive correlation between the two. Dell and Lawrence (1980) compared the growth of GDP and its principal components for non-oil ldcs which experienced reduced expansion of import capacity in 1973-76 (a) with their performance in 1965-73 and (b) with countries enjoying sustained or improved expansion of import capacity. By both comparisons, reduced import capacity was associated with a slower GDP growth. There was a particularly sharp contrast in the investment growth of the two country groups, which was nearly four times as rapid in the countries with sustained or improved growth in import capacity. As a refinement, he classified the 13 countries studied in detail in his report according to whether their 'developmental' imports had been compressed in 1974-76 and then compared their growth records. Here too, he found that growth in the eight countries with import compression was well below their own previous achievements and the contemporaneous achievements of the five more fortunate countries. Here again the contrasts were particularly severe with respect to investment.²³

More up-to-date evidence of a similar kind is presented in Table 2-7. For ldcs as a whole and for both sub-groups a strong positive association is revealed between the growth of import volumes and GDP, an association which is particularly striking because, with imports a negative entry in national accounting aggregates, there is a statistical bias towards a negative correlation.

^{23.} See Dell and Lawrence, 1980, chapters 1 and 2 for explanation of the methodologies.

Countries with import volumes expanding at more than 10% p.a. achieved average GDP growth rates more than four times as rapid as countries with declining import volumes. Lines D1 and D2 of the table also serve to emphasise once again the particularly disadvantaged position of low-income ldcs. There is admittedly an ambiguity about the direction of causality here, since variations in GDP growth will influence the volume of imports <u>demanded</u>. Examination of colums (2) and (3) of Table 2-7 suggests, however, that it is unlikely that much of the revealed variations in import volumes could be explained by the variations in GDP growth, given reasonable assumptions about the values of the marginal propensity to import or the income elasticity of demand for imports.

If there is a positive correlation between imports and GDP growth, it must be expected that there will also be a positive relationship between exports and GDP growth because export performance is the prime determinant of import capacity. There is a good deal of evidence that such an association does exist, even in tests which correct for autocorrelation between export growth and GDP growth.²⁴ In fact, it is now rather widely accepted that export-oriented policies can offer a more promising development strategy than policies which emphasise import substitution. Besides the association of export expansion with a growing import capacity, there is also much evidence that export performance has a strong impact on saving and investment.²⁵ Export industries are also likely to make a more efficient use of resources because of the often intense competitive pressures on world markets and a superior ability to achieve economies of scale, by comparison with industires based upon a small, sheltered, domestic market.

There is also evidence to support the contention that balance of payments difficulties constrain economic growth by holding back the expansion of demand. Studies of long-run trends in the now industrialised countries (Thirlwall, 1979; Maddison, 1979) indicate the apparent importance of this as an explanation of differences in the growth of output and productivity. As regards developing countries, it is perhaps sufficient to note that demand restraint is almost invariably included in the stabilisation measures adopted to deal with payments crises and are the core component of the policy recommendations of the IMF. These matters are examined in detail later in this book.

- 24. For recent tests along these lines see Michaely (1977); Heller and Porter (1978); Balassa (1978); and Krueger (1978, chapt. 11). However, the first two-mentioned of these studies failed to find a significant positive correlation when their tests were confined to <u>low-income</u> ldcs.
- 25. See the literature summarised by Mikesell and Zinser (1973 pp. 18-19); and also Chenery and Syrquin (1975, Table 6), and Weisskopf (1972A).

Tabl	le 2-1: The Growth of	Import Volumes an	a GDP, 1970-78	
		(% per annum,	in constant price	s)
		No. of countries (1)	Import growth (2)	GDP growth (3)
<u>A - Count</u>	ries with static or d	eclining import vo	lumes	
1. 2.	Low-income ldcs Middle-income ldcs	13 2	-4.3 -3.8	1.2 4.2
3.	Low- and middle-inco combined	me 15	-4.2	1.6
<u>B</u> – Count	ries with import volu	mes growing at up	to 10%	
1. 2. 3.	Low-income ldcs Middle-income ldcs Low- and middle-inco	11 14	5.7 5.1	3.3 4.6
5.	combined	25	5.3	4.1
<u>C - Count</u>	ries with import volu	mes growing at mor	e than 10%	
1. 2. 3.	Low-income ldcs Middle-income ldcs Low- and middle-inco	3 9	13.7 16.6	5.2 7.1
. ر	combined	12	15.9	6.6
D - Overa	all averages for all L	dcs		
1. 2. 3.	Low-income ldcs Middle-income ldcs Low- and middle-inco		1.8 8.5	2.5
	combined	52 Deck Weith December	5.0	3.9

Table 2-7: The Growth of Import Volumes and GDP, 1970-78^a

Source: Computed from World Bank, <u>World Development Report</u>, 1980, Tables 2 and 8.

<u>Note</u>:

 (a) Unweighted means of country data. Countries with 1978 per capita incomes of up to \$300 are classified as 'low-income'; 'middle-income' countries have per capita incomes of \$301-1000.

But while there are good grounds for believing that the vulnerability of ldcs to payments disequilibria harms the growth of their economies, it is important to keep the extent of this harm in perspective. Many factors influence an economy's expansion independently of the performance of the external sector and in only some cases will shortages of foreign exchange be the binding constraint.²⁶ Dell and Lawrence's study of the mid-1970s

^{26.} Weisskopf (1972A) undertook econometric tests of the two-gap model with data on 44 ldcs. Of these, 7 proved to be unclassifiable in two-gap terms, in 8 foreign exchange was the binding constraint, in 23 savings was the binding constraint, and in 6 the results were mixed. Landau (1971) similarly found foreign exchange to be clearly the binding constraint in only 6 out of 18 Latin American countries studied.

revealed much diversity of experience among the countries examined, and the fact is that the major disequilibria of the mid-seventies had an only moderately. depressing effect on the expansion of ldc output. Taking all non-oil ldcs together, the estimated expansion of per capita GDP fell from 3.7% in 1970-73 to 2.5% in 1975, recovering somewhat thereafter.²⁷ It is particularly desirable to avoid exaggerating the seriousness of the negative effects when we turn later to examine the costs and benefits of stabilisation measures.

In fact, the nature of the policy response will itself be a prime determinant of the extent to which payments disequilibria retard economic development. Broadly speaking, policy responses may have an inward- or outward-orientation. An inward-looking response resorts to restrictive exchange controls and emphasises an import-substitution growth strategy. The probable misallocative effects of controls and high protection barriers are likely to magnify the damage done by inadequate import capacity, because imports will not be put to their most productive use and local industry will substitute for imports only by incurring often inefficiently large domestic resource costs. And if, as is frequently the case, exchange controls are used as a way of avoiding a devaluation and of maintaining an over-valued currency, they will also impose disincentives upon the export sector, thus leading to a further weakening of the underlying payments situation.²⁸

Some of the countries which have adopted a more outward-looking stance appear to have minimised the dangers to growth of a foreign exchange constraint. We have referred already to the evidence of a positive correlation between exports and economic growth. Balassa (1978, p. 188) writes:

> ... trade orientation has been an important factor contributing to inter-country differences in the growth of incomes. It is further apparent that income increments have been achieved at a substantially lower cost in terms of investment in countries that have followed a consistent policy of export orientation.

Krueger (1978, p. 284) suggests that one reason for this is that an outwardlooking orientation will itself be conducive to better policy-making: "... an export promotion strategy appears to place certain kinds of constraints upon economic policy and its implementation; those constraints, in turn, limit the magnitude and duration of policy mistakes and also tend to force policies to work through pricing, rather than quantitative, interventions."

28. See Bhagwati (1978), Krueger (1978) and the associated country studies for evidence on this. See also Little, Scitovsky and Scott (1970) and the associated country studies; and Killick (1978) on Ghana.

^{27.} See ODI, 'The slump of 1980 and the Third World', Briefing Paper No. 3 1980, April.

As in Ghana, reported later in this volume, it does seem that controls have contributed their share to some of the best-known cases of economic failure, although this is not to say that a liberalised, export-oriented approach will be feasible or optimal for all countries. The main point is the more neutral one, that the natural tendency for payments disequilibria to depress economic development can either be minimised or aggravated by the way in which governments respond to the problem. This fact in itself points up the importance to development of well-chosen policies of economic management. Finally, we are unable to offer any generalisations on the impact of payments disequilibria on the distribution of income.²⁹

III - A FIRST APPROACH TO THE SOURCES OF THE PROBLEMS

In the country case studies and elsewhere a good deal will be said about the causes of inflation and payments disequilibria. It is a large and difficult subject because of widely varying country circumstances as well as strong differences of judgement among economists. Nevertheless, it is useful at this point to attempt a preliminary overview and to consider the implications for stabilisation policy. We begin by examining the balance of payments.

Sources of payments disequilibria

Given the large increases in the scale of global payments disequilibria during the years after the OPEC quadrupling of oil prices, we are particularly interested in the extent to which the disequilibria may be attributed to international forces beyond the control of the individual countries which experienced them. It is, in fact, rather obvious that there was a strong connection between the growth of non-oil ldc current account deficits in the mid-seventies (Table 2-6) and the sharply rising prices of their oil and industrial imports in the same period. That is scarcely a matter for controversy. But even for earlier periods there is an important body of writings which emphasises the malign influence of exterior forces on the payments situations of ldcs. Probably the most influential were the Latin American structuralists who argued, in particular, that the structure of world demand

^{29.} Knight's (1976) theoretical analysis of the distributional consequences of devaluation reveals the complexity of relationships between income shares and the balance of payments, and the wide range of possible outcomes, depending upon the socio-economic structure of the country in question.

combined with oligopolistic pricing policies in the industrial economies results in a long-term tendency for the commodity terms of trade of 1dcs (or of primary product exporters) to deteriorate. In the well-known Prebisch formulation (1964) the real income effect of this adverse trend in relative prices was equivalent to a transfer of resources from poor nations to rich, which should be offset by improved trading arrangements and larger aid flows. This issue was quickly joined by dissenters and there ensued a large, protracted attempt to resolve the issue by empirical analysis.

These tests have not been conclusive, however. The results are highly sensitive to the precise coverage of the tests, to the data and weights employed and, especially, to the period selected for analysis. Bird's (1978, p. 70) survey of the evidence concluded that during the 1950s and into the early-60s there was evidence of a deterioration in ldc commodity terms of trade, that these stabilised in the mid-to-late 1960s and then improved markedly in 1969-74. However, he also pointed to much diversity of experience among ldcs, so that generalisations for them all have become increasingly difficult and meaningless. A more recent essay by Spraos (1980) has suggested that there is evidence of a secular deterioration for primary producers (and developing countries) for 1870-1940, although not as large as that suggested by Frebisch, but that in the post-war period (and even excluding petroleum after 1973 as a special case) the experience of primary product exporters was a good deal better. It is not, of course, in doubt that non-oil ldcs suffered a serious worsening in their terms of trade in the years from 1974, although it seems that this was entirely the result of the relative rise of oil prices.³⁰

But while some have viewed the alleged secular trend in the terms of trade, as well as the greater instability of 1dc export prices, as destabilising factors, others have strongly disputed the implication that reduced dependence on the outside world would promote stabilisation. An essay by Mathieson and McKinnon (1974) tested the relationship between various indications of instability and integration in the international economy for the period 1950-68 and found a negative relationship: the greater the degree of integration the less the instability. Using pooled data for dcs and 1dcs together the results were statistically significant; because of a smaller number of observations, the results for 1dcs alone were less significant but showed the same negative sign. The authors suggest that

^{30.} In 1973-79 non-oil ldcs' export prices rose more rapidly than the export prices of industrial countries, suggesting that the terms of trade between these two groupings alone moved to the advantage of ldcs (see export price indices in International Financial Statistics).

it is easy to be misled by a small number of extreme cases (Ghana and cocoa; Zambia and copper) and that overall their evidence showed that the international economy had a net stabilising effect on the economies of poor countries during the period tested (which, however, excluded the large disturbances of the 1970s). They argue, therefore, that policies of disengagement from international trade are more likely to aggravate domestic instability than to reduce it.

Reichmann (1978) provides evidence of a different kind. He examines the 21 stand-by arrangements agreed by the IMF in 1973-75 (18 of which were for ldcs) and includes a summary of the Fund staff's analyses of the causes of the balance of payments difficulties underlying the need for Fund credits. His results are reproduced in Table 2-8. These, however, need to be interpreted with care because the table simply records the subjective judgements of IMF country missions and because the period 1973-75 rather awkwardly straddles the immediate pre- and post-oil crisis years.

	Payments Problems ^a			
	Cause	major factor	minor factor	total
l.	Over-expansionary demand policies	15	2	17
2.	Cost and price distortions	13	6	19
	of which: (a) related to the exchange rate	11	3	14
	(b) related to other prices and wages	6	10	16
3.	Exogenous developments	9	7.	16
	of which (a) related to international trade	9	5	14
	(b) related to non-economic events	4	4	8

Table 2-8. IMF Judgements about the Sources of Balance of

Reichmann, 1978, Table 1. Source:

Note:

(a) The figures record the number of programmes affected out of the total of 21. The lines lettered (a) and (b) do not sum to the figures in the main entries to which they relate, which are based on overall judgements about the importance of each category.

Confining ourselves to the 'major factor' column, the Fund's economists evidently saw domestic demand or cost/price factors as more important sources of payments difficulties than disturbances emanating from international trade and other exogenous factors. In their view, domestic policy mistakes resulting in excess demand and/or over-valued currencies were the chief sources of difficulty, with trade-related exogenous factors coming a poor third. Comparable but unpublished analyses for later years reveal a similar balance of opinion within the Fund.

Data in Dell and Lawrence (1980) throw further light on the relative importance and external factors and, in addition, permit a clearer differentiation of the pre- and post-oil crisis periods. Utilising UN data, they analysed deteriorations in trade accounts experienced by non-oil ldcs according to various categories of primary causal factors, with the results summarised in Table 2-9.

Table 2-9. Principal Factors in Year-to-Year Deteriorations

	in the Trade Accounts of Non-oil 1dcs, 1962-76 (percentages of total) ^a						
	primary causal factor	1962-72	1973-76				
1.	Increases in import quantities	41	15				
2.	Increases in import prices	8	33				
3.	Decreases in export quantities	35	21				
4.	Decreases in export prices	17	31				
5.	Total ^b	100	100				

Source: Dell and Lawrence, 1980, Table 1-6.

Notes: (a) Their figures have been reworked to exclude those observations for which no primary cause was identified.

(b) Subject to rounding errors.

The most striking thing about Table 2-9 is the great divergence between the two periods. For 1973-76, increases in import prices and declines in export prices between them account for two-thirds of the total and it is reasonable to regard both of these as exogenous, beyond the control of individual governments. Decreases in export quantities (21% in the latter period) are more ambiguous because they might result from poor domestic policies, adverse weather conditions, as a response to falling prices in an earlier period or for other reasons. Increases in import quantities, on the other hand, could be taken as endogenous, resulting from domestic economic conditions and policies, subject only to the caveat that the degree of domestic control over import volumes is bound to be imperfect.

By contrast with 1973-76, the record for 1962-72 draws attention to the important influence of domestic factors. Increases in import quantities are the single most important cause, followed closely by reductions in export quantities. Exogenous price disturbances are rated as the primary causal factor in only a quarter of the total observations. As Dell and Lawrence put it (p. 12), "the relatively high frequency with which increased import volumes appear as the primary factor during 1962 to 1972 is consistent with the view that deteriorations in the trade accounts of these countries, and accompanying deteriorations in their overall payments positions, were often associated with the demand pressures for imports resulting from the development process, as well as from short-run problems of demand management." For this period their results are consistent with the emphasis by the IMF on over-expansionary domestic demand policies. So are the results of investigations into the sources of inflation in developing countries (see page 38).

This discussion thus provides support <u>both</u> to those who stress the importance of domestic policies for balance of payments management and to those who emphasise the malign influence of exogenous factors. The distinction between externally- and domestically-caused disequilibria emerges as specially relevant for the post-1973 period, and as we will see in a later chapter, it is an important distinction when evaluating the policies of the IMF.

The causes of inflation

There is much controversy, and a large accompanying literature, on the causes of inflation in ldcs. We can make a beginning by continuing to explore the relative importance of external and domestic forces, for the global nature of inflation has become evident in recent years and some have emphasised the inflationary effects of rising import prices. This too is a topic investigated in more depth in the country studies (where, for example, it is shown that rising import prices only contributed much to Kenya's domestic inflation in one or two years). On the basis of cross-country data, it is difficult to believe that rising import prices could directly explain more than a modest part of ldc inflation. Remember that ldc imports are typically equivalent to

about 20% of GDP, so that the impact of a 10% increase in import prices should only be to add about 2% to the general price level. If we confine ourselves to impact effects, even the large import price rises of the post-1973 years could only account statistically for a moderate increase in the inflation rate.

Even more persuasive, however, is the fact that at all times ldc inflation rates have been faster than the rate of increase in import prices, as is shown in Table 2-10.

Tal		of Increase of Co	nsumer and In	port Prices
	i	n Ldcs, 1950-79		
			(% p.a., compound)	
		con	sumer prices	import prices
	1950-59		4	1
	1960-69		4	1
dan laki din asar lah alam kini	ان ای بی برا دومه بی بی زیر پینده تاریخ خو بی گ	بر میکنون با با با از این مید بعد این بین که بین بین بین بین بین این بین بین این بین این بین بین بین ب	وه هه اجارها ها بله هر در بوروه هوهه هوه) میں میں منتخبہ علم مند الکے میں بروز اور
	1967-72		10	2
	1973-79		27 (19) ^a	13
Sources		from Heller, 1976 from <u>Internationa</u>		tatistics.
	for 1967-79:	from Internationa	1 Financial S	tatistics.

Note: (a) The figure in brackets excludes the data for six high-inflation countries.

It could, no doubt, be countered that the impact effects of rising import prices are magnified by the resulting attempts of wage earners and others to protect their living standards, so that even a modest initial impact could lead to a large and continuing inflation. It is doubtful, however, whether such powerful propagation mechanisms exist in more than a minority of ldcs. We should also remember the finding reported above of a negative correlation between inflation and openness. While it is the behaviour of import prices no doubt which contributed importantly to the accelerated inflation of 1973-79, even for this period it is evident that there were also powerful domestic forces at work. We therefore turn to consider the relative importance of the various possible domestic sources of inflation. A good deal of the relevant literature has already been surveyed by the present writer elsewhere and it is a useful short-cut to reproduce the main conclusions below, before going on to consider further evidence.

These were as follows (Killick, 1981, p. 171):

- (1) Both supply and demand factors contribute to an on-going inflation. This makes it difficult to establish the initiating cause.
- (2) There is, in any case, no reason for thinking that the initiating force will be the same for all countries, or at different times in a single country.
- (3) Although import prices (b) have an inflationary influence, the cost-push model fails to provide an adequate explanation of the initiation of inflation in most developing countries.
- (4) Structural considerations help to explain why ldcs are generally more prone to inflation than industrial countries. But the inflationary effects of structural disequilibria are unlikely to be large in most circumstances and they cannot explain widely varying inflation experiences among developing countries, nor the initiation of rapid inflations experienced in a few of them.
- (5) Expansion of the supply of money more rapidly than the growth in demand for it is sufficient to initiate inflation and essential to keep inflation going. This was probably the initiating force in at least some high-inflation countries. However, the impact of rising prices on the general public is limited to the extent that production and consumption still occurs outside the monetized part of the economy.

Consideration of additional evidence allows conclusion (5) to be stated more firmly, for the balance of the results of empirical work (which is admittedly mainly confined to Latin America) points to the predominant influence of monetary forces in the process of inflation. This is true of both cross-country and individual-country analyses, with almost all investigators showing a positive, but lagged, correlation between the inflation rate and monetary expansion.

To take cross-country studies first, Argy (1970) studied Latin American data to test the validity of structural explanations of inflation. He found little statistical support for the structural model but obtained much stronger results when the rate of change of money supply was added as an explanatory variable. Vogel (1974) also utilised Latin American data and found current and lagged money supply to be highly significant explanatory variables; this result was subsequently supported in work by Holden and Peel (1979), who found results that were consistent with monetarist explanations in 16 out of 18 Latin American countries. Lin and Siddique (1978) looked beyond Latin America at non-oil ldcs generally and they too emphasised the important influence of rapid increases in domestic credit, much of it resulting from the financing of budget deficits. Iyoha (1973) is the only investigator of whom we are aware who does not corroborate the strength of monetary variables, but even in his investigation the sign was 'correct'.³¹ Evidence supporting a somewhat different monetary interpretation of inflation was provided by Heller's (1976) successful attempt to relate global inflation to lagged data on world money supplies.

In-depth country studies also point to the importance of monetary factors. In this area of investigations the most powerful influence has been the model originally developed by Harberger (1963) in his study of the Chilean case. Numerous subsequent investigators have found, as he did, that monetary variables are highly significant explainers of rising prices. This is true of Diaz-Alejandro (1965) and Diz (1970) on Argentina; Colaco (1969) on Brazil and India; Kahil (1973) on Brazil; Bomberger and Makinen (1979) on Korea, Taiwan and Vietnam; and Wachter (1979) on Chile.

One of the other principal findings of Harberger's original study was of a negative association between inflation and real income growth. For Chile he found that, <u>ceteris paribus</u>, a 1% increase in GDP was associated with a roughly 1% reduction in the inflation rate. The studies already cited by Argy, Diaz-Alejandro, Diz, Vogel, Bomberger and Makinen (for Korea and Taiwan but not Vietnam) and Wachter have all confirmed the existence of such a negative correlation. Once again, Iyoha is the sole exception, finding a strong positive relationship between growth and inflation. Lucas (1973) used cross-section analysis to test a more subtle view of the relationship between these variables, postulating and finding evidence in support of the view that the occasional moderate use of inflation will stimulate output but that, because of its effects on expectations, the large and/or persistent use of inflation will reduce output. Some such behaviour pattern would be consistent with the earlier suggestion (Figure 2-1) of an inverted-U relationship between growth and inflation.

There is, however, a difficulty of interpretation in these results. The Harberger hypothesis implies causality which runs from growth to (reduced) inflation, presumably because an expanding supply of goods and services will absorb purchasing power that would otherwise induce price increases. For reasons given there, our earlier discussion of the consequences of inflation argued a causality running from inflation to (first increased then reduced) growth. Of course, these do not have to be mutually exclusive views of the matter; the two variables presumably interract upon one another.

31. See also the interchange between Kirkpatrick and Nixson and Iyoha in Economic Development and Cultural Change, 22(1), October 1977.

Nevertheless, ambiguity in this matter of causality leads to a policy puzzle. Orthodox demand-management policies will almost inevitably reduce economic growth in the short term and this is often viewed as a necessary cost of bringing inflation under control. On the Harberger view, however, reduced growth will make it all the harder to control inflation. The logic of this view favours an 'expanding out of inflation' strategy, whereas the orthodox would predict that expansionary measures would simply add to inflation. It is probably true to say that experience on this tends to vindicate orthodoxy but this is a matter to which we return later in the volume.

Much of the controversy about the causes of ldc inflations has been dramatised as a dispute between structuralist and monetarist schools, and evidence indicating a monetarist explanation has not ended this controversy. Structuralist writers do not deny that monetary expansion is a necessary component of sustained inflation but see money supply as responding passively to inflationary impulses initiated by structural characteristics (see, for example, Diaz-Alejandro, op cit). Nevertheless, the balance of the argument has clearly moved against the structural school, for a number of additional reasons.

We have already mentioned that Argy's (1970) attempt to test the structuralist model yielded essentially negative results, although he was careful to stress the difficulties of reducing the model to measurable units. On the basis of a reformulation of the structuralist hypothesis, Wachter (1979) found support for both the monetarist and structuralist positions in her study of inflation in Chile. Vogel (1974, p. 113) similarly addressed the influence of structure in cross-section work on 16 Latin American countries, concluding that:

> The most important result of the present study for this controversy is that a purely monetarist model, with no structuralist variables, reveals little heterogeneity among Latin American countries, in spite of their extreme diversity. The substantial differences in rates of inflation among these countries cannot under the present model be attributed to structural differences, but must be rather attributed primarily to differences in the behaviour of the money supply.

Two additional considerations throw doubthen the structuralist case. We have already noted that the relationship between inflation and monetary expansion is a lagged one (although the length of time involved varies considerably across studies), with current prices apparently responding to past increases in money supply. This increases the plausibility of viewing causality as running from money to prices, unless it could be shown that

the earlier expansion in money supply was itself a response to rising prices. There is also the general finding of a negative association between GDP growth and inflation. The essence of the structuralist case is that inflation is essentially a consequence of the structural disequilibria associated with economic development but if this were the case we would expect output expansion and price increases to be positively associated, rather than the opposite.

The balance of the evidence summarised above thus points rather firmly to monetary expansion as the chief proximate source of inflation. If this is accepted, it has implications for our earlier consideration of the causes of balance of payments difficulties, for the excess demand generated by monetary expansion will increase the demand for imports and exportables in addition to pulling up domestic prices. Given government reluctance to depreciate the currency in line with increases in domestic prices and costs relative to those of the outside world, inflation tends to result in overvalued currencies, which reduces the incentives to export and to produce local import-substitutes. Acceptance of the proposition that inflation frequently has roots in the monetary system thus lends support to the IMF view, reported earlier (page 3D), that a high proportion of countries' foreign exchange difficulties have domestic origins.

But some important qualifications are necessary. First, while the available published evidence does lean towards monetarist explanations there is by no means unanimity and there are no grounds for believing that inflationary processes are uniform between countries. One difficulty is that the sturcturalist argument does not lend itself easily to statistical testing (Argy, 1970), which may bias results in favour of alternative hypotheses. More fundamentally, the monetary factor can only offer a superficial explanation, which is why we have called it a "proximate" source of inflation. Always assuming governments to have control over monetary aggregates (but see chapter 3), we are left with the question why governments allow money supply to expand so fast as to produce unwanted inflation and payments difficulties.

The answer is probably that effective measures to halt monetary expansion are at least as unpopular as inflation and foreign exchange shortages themselves. Cutting back on government spending, imposing credit restrictions, increasing taxation are all measures liable to worsen unemployment in economies already characterised by much unemployment; to reduce private consumption in countries with already low living standards; and to reduce public-sector investment in a situation of capital scarcity.

It is also likely that those who gain from inflation (or who would suffer most from attempts to control it) are among the politically more powerful members of society, for the business community can expect profit margins to widen with demand inflation but to narrow during periods of demand restraint. The government itself is likely to stand among the gainers. Even if, as is suggested in chapter 3, government expenditures often move ahead of tax receipts in response to inflation, the government will still benefit from the lower real cost of servicing the domestically-owned public debt and from the 'inflation tax'. Treasury officials may thus be ambiguous about anti-inflation measures, and they are a group of key importance. On the other side, the welfare costs of inflation tend (a) to be diffused across the general consuming public but (b) to be particularly concentrated on groups possessing little political clout - the urban poor and various categories of economic dependents (Killick, 1975). Governments have to weigh the diffused and ambiguous unpopularity of allowing inflation against the often more sharply focussed unpopularity of, and resistances to, counter-measures. Inflation may cause less social disharmony (and lose less popular support) than its alternatives, which helps to explain why governments are so rarely willing to pursue antiinflation policies successfully for more than temporary interludes.

Even if the monetarist explanation is accepted, therefore, the management of inflation and the balance of payments is not just a technical matter of regulating money supply and it is for reasons of this kind that there is a growing literature offering socio-political explanations of inflation (Addison and Burton, 1980). Economic stabilisation measures thus involve highly political judgements and the sensitivity of the issues helps explain why governments find it hard to pursue successful stabilisation or to accept the demand management policies urged upon them by the IMF.³²

32. See the special issue of <u>World Development</u>, 8 (11) November 1980, on the political dimensions of stabilisation in Latin America.

IV - SUMMARY AND CONCLUSIONS

What now are the mian results to emerge from this survey and what implications do they carry for the subject matter of this volume?

First, in respect of the behaviour of both prices and the balance of payments we have shown that, taken as a group, ldcs are considerably more likely to experience disequilibria than dcs. There is naturally a good deal of diversity in country experiences with an attendant risk of over-generalising but the evidence points clearly to more rapid inflation and greater price instability in ldcs. It is also evident that ldcs are more vulnerable to instability in their export prices, terms of trade and international reserves. Because of the complexity of the concept, it is less easy to compare performances with respect to balance of payments disequilibria but we have nonetheless examined a substantial and varied body of evidence pointing clearly to a tendency for (non-oil) ldcs to suffer particularly from such disequilibria, with low-income ldcs in an especially vulnerable condition.

A prima facie case is thus established for the importance of policies of economic management designed to reduce the disequilibria. Second, this case is further strengthened by consideration of the consequences of the disequilibria, for we have seen that both inflation and balance of payments imbalances are likely to affect economic development adversely. It was suggested that there is an inverted-U relationship between inflation and GDP growth, and that price instability per se also hampers growth. More tentatively, it was suggested that demand inflation was liable to increase inequalities in the size distribution of income, although much would depend upon its impact on ruralurban terms of trade. As regards foreign trade, export price instability rarely has more than minor adverse effects on economic performance but the evidence on payments disequilibria suggests that it retards economic growth a result which can, however, be much affected by the policies adopted to rectify the imbalances. A rather firm case is thus established for the proposition that policies which avoid more than moderate inflation and payments disequilibria will contribute to economic growth and may thus be viewed as an integral part of an adequate development effort.

A third conclusion, however, is that the case for economic stabilisation should not be exaggerated. Price and payments disequilibria are only two among many potential obstacles to development and we have suggested that their adverse effects will often only be moderate. A substantial reduction in instability may call forth an only modest increase in growth, unless the

initial disequilibrium is severe. Brazil, for instance, has amply demonstrated that it is possible to achieve economic growth even in the face of very rapid inflation. The rational policy-maker will thus remember that there is a price above which it is not worth paying in order to buy equilibrium. Indeed, in the case of inflation we have suggested that there is a good case for policies that maintain a moderate pressure of demand on resources; it has also been suggested that stabilisation programmes which severely reduce the growth of an economy make it all the harder to achieve the desired reduction in inflation.

Fourth, our discussion of the meaning of payments and price equilibria carried implications for the definition and monitoring of policy objectives. In the case of the balance of payments, we have shown that the notion of an equilibrium is both complex and conditional upon the satisfaction of other objectives. Objectives expressed simplistically in the form of targets for, say, the current account balance or the value of reserves are unlikely to provide an adequate measure of achievements; and payments objectives are best defined in the broader context of the government's overall economic goals. As regards inflation, we have shown that, even if it were desirable to reduce the absolute price level (which is unlikely to be the case), such an achievement is almost certainly beyond the power of national governments. The sensible question is, <u>how much</u> inflation; above what 'normal' or 'acceptable' rate of price increases is action regarded as desirable?

Fifth, we have shown exogenous disturbances to be important sources of disequilibrium, particularly for the balance of payments. Support is thus provided to those who stress the importance of distinguishing between exogenous and endogenous sources of disturbance when devising stabilisation policies. Even if an exogenous factor (such as the large relative increase in the price of oil) proves to be more than transitory and must therefore be accommodated eventually, the period of adjustment and the design of policies in this case are liable to differ from measures required to cope, say, with excessive domestic money creation. But while this distinction does emerge as important it can become blurred if carried too far. If a government persistently declines to act effectively to adjust to a persisting deterioration in the terms of trade and consequently suffers a payments crisis, are we to attribute that to external or domestic causes?

Sixth, the results of this survey have provided considerable reinforcement to those, like the IMF, who emphasise the role of domestic, and especially monetary, factors in the emergence of payments and inflationary disequilibria. This emphasises the potential value of orthodox fiscal and monetary demand management measures in the pursuit of stabilisation and implicitly rejects the arguments of those who claim that such policies are in some sense irrelevant to ldc circumstances.

Finally, however, we have concluded by pointing out an element of superficiality in monetarist explanations, which fail to examine the political circumstances which result in excess money creation. The peculiar unpopularity of stabilisation measures with politicians (and often their constituents) and the importance of viewing disequilibria within the socio-political context which gave rise to them are bound to create acute difficulties for an international agency like the IMF. It is not professionally equipped to undertake this task and could only make explicit judgements about the political circumstances at the large risk of incurring even more wrath from governments or their opponents. There is no escape from this, however. A political judgement is already implicit in the Fund's stabilisation programmes and it is better that these should be consciously based on a systematic evaluation than that they should be the residual outcome of 'technical' analyses which, whatever the intention, cannot be value free. Undoubtedly one of the most difficult aspects of such an evaluation would be to discriminate between genuine political constraints on the one hand and the pleading by governments of alleged political constraints to conceal their own reluctance to face up to economic realities. Perhaps in the end the 1979 decision that the Fund should "pay due regard to the domestic social and political objectives, the economic priorities, and the circumstances of members" in designing its programmes will turn out to be a highly significant one.

REFERENCES

Addison, J.T. and Burton, J., <u>The Explanation of Inflation: Monetarist or</u> Socio-Political Analysis? London, Macmillan, 1980.

Argy, Victor, 'Structural inflation in developing countries', Oxford Economic Papers, March 1970.

Balassa, B.A., <u>Trade Prospects for Developing Countries</u>. Homewood, Ill., Irwins, 1964.

, 'Exports and economic growth: further evidence', Journal of Development Economics, June 1978.

Bhagwati, Jagdish, Anatomy and Consequences of Exchange Control Regimes. Cambridge, Mass., Ballinger Co., 1978.

Bird, Graham, The International Monetary System and the Less Developed Countries. London, Macmillan, 1978.

Bomberger, W.A. and Makinen, G.E., 'Some further tests of the Harberger inflation model using quarterly data', <u>Economic Development and Cultural Change</u>, 27(4), July 1979.

Chenery, Hollis and Syrquin, Moises, Patterns of Development, 1950-1970. London, Oxford University Press, 1975.

Colaco, Francis X., 'Herberger's inflation model: a critique and test using data for Brazil and India', Indian Economic Journal, XVI (4-5), April-June 1969.

Cole, David C., 'Concepts, causes and cures of instability in ldcs', in McKinnon, R.I. (ed.), <u>Money and Finance in Economic Development</u>. New York, M. Dekker, 1976.

Dell, Sidney and Lawrence, Roger, The Balance of Payments Adjustment Process in Developing Countries. New York, Pergamon Press, 1980.

Diaz-Alejandro, C., Exchange Rate Devaluation in a Semi-Industrialized Country: the Experience of Argentina, 1955-61. Cambridge, Mass., MIT Press, 1965.

Diz, A.C., 'Money and prices in Argentina, 1935-62', in Meiselman, D. (ed.), Varieties of Monetary Experience. Chicago University Press, 1970.

Dorrance, G., "Inflation and growth: the statistical evidence', IMF Staff Papers, March 1966.

Edel, Matthew, Food Supply and Inflation in Latin America. New York, Praeger, 1969.

Galbis, Vicente, 'Money, investment and growth in Latin America, 1961-73', Economic Development & Cultural Change, 27(3), April 1979.

Glezakos, Constantine, 'Inflation and growth: a reconsideration of the evidence from the LDCs', Journal of Developing Areas, 12(2), January 1978.

Gupta, A.P., 'Inflation, income distribution and industrial relations in India', International Labour Review, August 1974. Harberger, Arnold, 'The dynamics of inflation in Chile', in Christ, Carl F. (ed.), <u>Measurement in Economics: Studies in Mathematical Economics and</u> <u>Econometrics.</u> California, Stanford University Press, 1963.

Heller, H.R., 'International reserves and world-wide inflation', IMF Staff Papers, XXIII(1), March 1976.

Heller, Peter S. and Porter, Richard C., 'Exports and growth: an empirical re-investigation', Journal of Development Economics, June 1978.

Hirschman, Albert O., Strategy of Economic Development. New Haven, Yale U.P., 1958.

Holden, Kenneth and Peel, David A., 'The relationship between prices and money supply in Latin America, 1955-1975', <u>Review of Economics and Statistics</u>, LXI(3), August 1979.

International Monetary Fund, General Statistics Division, 'Measures of global inflation', Series PIFS/1979/3 (mimeo), Washington, IMF, August 1979.

Iyoha, Milton Ame, 'Inflation and "openness" in less developed economies: a cross-country analysis', Economic Development & Cultural Change, 22(1), October 1973. (See also the interchange between Iyoha and C.H. Kirkpatrick and F.I. Nixson,

same journal 26(1), October 1977.)

Kahil, Raouf, <u>Inflation and Economic Development in Brazil, 1946-63</u>. London, Oxford U.P., 1973.

Killick, Tony, 'Inflation, interest groups and political response', Polity, Summer 1975.

, <u>Development Economics in Action: a Study of Economic Policies</u> in Ghana. London, Heinemann Educational Books, 1978.

, Policy Economics: a Textbook of Applied Economics on Developing Countries. London, Heinemann Educational Books, 1981.

Knight, J.B., 'Devaluation and income distribution in less developed economies', Oxford Economic Papers, July 1976.

Krueger, A.O., <u>Liberalization Attempts and Consequences</u>. Cambridge, Mass., Ballinger Co., 1978.

Landau, Luis, 'Savings functions for Latin America', in Chenery, Hollis B. (ed.), <u>Studies in Development Planning</u>. Cambridge, Mass., Harvard University Press, 1971.

Lawson, C.W., 'Changes in the export instability of less developed countries: a dissenting note', <u>Banca Nazionale del Lavoro Review</u>, 132, March 1980.

Lim, David, 'Income distribution, export instability, and savings behavior', Economic Development and Cultural Change, 28(2), January 1980. Lin, C-Y and Siddique, A.K.M., 'Recent patterns of inflation in the non-oil developing countries', <u>Finance and Development</u>, 15(4), December 1978.

Lisk, F., 'Inflation in Ghana, 1964-75', International Labour Review, May-June 1976.

Little, I.M.D., Scitovsky, T., and Scott, M., <u>Industry and Trade in some</u> Developing Countries: a Comparative Study. London, Oxford U.P., 1970.

Lucas, Robert E. Jr., 'Some international evidence on output-inflation tradeoffs', American Economic Review, 63(3), June 1973.

Maddison, Angus, 'Long-run dynamics of productivity growth', Banca Nazionale del Lavoro Quarterly Review, 128, March 1979.

Mathieson, D.J. and McKinnon, R.I., 'Instability in underdeveloped countries: the impact of the international economy' in David, P.A. and Reder, M.W. (eds.), Nations and Households in Economic Growth. New York, Academic Press, 1974.

Michaely, M., 'Exports and growth: an empirical investigation', <u>Journal of</u> Development Economics, March 1977.

Mikesell, R.F. and Zinser, J.E., 'The nature of the savings function in developing countries: a survey of the theoretical and empirical literature', Journal of Economic Literature, March 1973.

Murray, David, 'Export earnings instability: price, quantity, supply, demand?', Economic Development and Cultural Change, 27(1), October 1978.

Prebisch, Raul, <u>Towards a New Trade Policy for Development</u>. New York, United Nations, 1964.

Reichmann, T.M., 'The Fund's conditional assistance and the problems of adjustment', Finance and Development, 15(4), December 1978.

Salop, Joanne and Spitäller, Erich, 'Why does the current account matter?' IMF Staff Papers, 27(1), March 1980.

Spraos, John, 'Why inflation is not relative price-neutral for primary products', World Development, 5(8), August 1977.

, 'The statistical debate on the net barter terms of trade between primary commodities and manufactures', Economic Journal, 90 (357), March 1980.

Thirlwall, A.P., Inflation, Saving and Growth in Developing Countries. London, Macmillan, 1974(A).

, 'The balance of payments constraint as an explanation of international growth rate differences', Banca Nazionale del Lavoro <u>Quarterly</u> <u>Review</u>, No. 128, March 1979.

Thirlwall, A.P. and Barton, C., 'Inflation and growth: the international evidence', Banca Nazionale del Lavoro Quarterly Review, September 1971.

Tun Wai, U., 'The relation between inflation and economic development: a statistical inductive study', IMF Staff Papers, October 1959.

Vining, Daniel R. and Eltwertowski, Thomas C., 'The relationship between relative prices and the general price level', <u>American Economic Review</u>, 66(4), September 1976.

Vogel, Robert C., 'The dynamics of inflation in Latin America, 1950-69', American Economic Review, 64(1), March 1974.

Wachter, Susan M., 'Structuralism vs. Monetarism: inflation in Chile', in J. Behrman and J.A. Hanson, <u>Short-term Macroeconomic Policy in Latin America</u>. Ballinger Press, Cambridge, Mass., 1979.

Weisskopf, Thomas E., 'An econometric test of alternative constraints on the growth of under-developed countries', <u>Review of Economics and Statistics</u>, LIV(1), February 1972(A).

, 'The impact of foreign capital inflow on domestic savings in underdeveloped countries', <u>Journal of International Economics</u>, No. 2, 1972(B).

Whitehead, Laurence, 'Mexico from bust to boom: a political evaluation of the 1976-1979 stabilization programme', World Development, 8(11), November 1980.